

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	ATTORNEY DOCKET NO. CONFIRMATION NO.		
09/918,724 08/01/2001		Richard W. Fling	2037.0040000 2475			
30734	7590 01/18/2005		EXAMINER			
BAKER + HOSTETLER LLP			TRAN, KHAI			
WASHINGTO	ON SQUARE, SUITE 1100					
1050 CONNECTICUT AVE. N.W.			ART UNIT	PAPER NUMBER		
WASHINGTON, DC 20036-5304			2637	2637		

2637
DATE MAILED: 01/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application	n No.	Applicant(s)			
		09/918,724	ļ.	FLING ET AL.			
Office Action Summary		Examiner	•	Art Unit			
		KHAI TRAI	N	2637			
Period fo	The MAILING DATE of this communica or Reply	tion appears on the	cover sheet with the c	orrespondence add	ress		
THE - Exte after - If the - If NO - Failu Any	ORTENED STATUTORY PERIOD FOR MAILING DATE OF THIS COMMUNICA nations of time may be available under the provisions of SIX (6) MONTHS from the mailing date of this communical period for reply specified above is less than thirty (30) of period for reply is specified above, the maximum statuture to reply within the set or extended period for reply will reply received by the Office later than three months after ed patent term adjustment. See 37 CFR 1.704(b).	ATION. 37 CFR 1.136(a). In no even cation. lays, a reply within the statut ory period will apply and will , by statute, cause the applic	t, however, may a reply be time ory minimum of thirty (30) day expire SIX (6) MONTHS from ation to become ABANDONE	nely filed s will be considered timely. the mailing date of this com D (35 U.S.C. § 133).	munication.		
Status				·			
1)⊠	Responsive to communication(s) filed	on <i>01 August 2001</i> .					
·	•	☐ This action is no	n-final.				
3)□							
Disposit	ion of Claims						
5) 6) 7)	Claim(s) 1 and 22 is/are pending in the 4a) Of the above claim(s) is/are Claim(s) is/are allowed. Claim(s) is/are rejected. Claim(s) is/are objected to. Claim(s) 1-22 are subject to restriction	withdrawn from con					
Applicat	ion Papers						
9)[The specification is objected to by the E	Examiner.					
10)[10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
11)	Replacement drawing sheet(s) including the The oath or declaration is objected to be	· ·	= ' '		- •		
Priority (ınder 35 U.S.C. § 119						
a)	Acknowledgment is made of a claim for All b) Some * c) None of: 1. Certified copies of the priority do 2. Certified copies of the priority do 3. Copies of the certified copies of application from the International	cuments have been cuments have been the priority documer I Bureau (PCT Rule	received. received in Applicatints have been received 17.2(a)).	on No ed in this National S	itage		
Attachmen	it(s)						
	ce of References Cited (PTO-892)	. 040)	4) Interview Summary				
3) 🔲 Infon	te of Draftsperson's Patent Drawing Review (PTO mation Disclosure Statement(s) (PTO-1449 or PT or No(s)/Mail Date	O/SB/08)	Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	ate atent Application (PTO-	152)		

Application/Control Number: 09/918,724

Art Unit: 2637

DETAILED ACTION

Election/Restrictions

- 1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-20, drawn to a use of the first mixer, a phase locked loop (PLL) and a second mixer for locating an underground object, classified in class 375, subclass 316.
 - Claims 21-22 drawn to a method of recovering information
 conveyed by the modulation sideband, classified in class 324, subclass
 236.
- 2. The inventions are distinct, each from the other because:

Inventions I and II are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions are claims 1-20 drawn to a use of the first mixer, a phase locked loop (PLL) and a second mixer for locating an underground object; claims 21-22 drawn to a method of recovering information conveyed by the modulation sideband.

3. Because these inventions are distinct for the reasons given above and have required a separate status in the art as shown by their different classification and by their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

Application/Control Number: 09/918,724 Page 3

Art Unit: 2637

4. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(l).

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to KHAI TRAN whose telephone number is (571) 272-3019. The examiner can normally be reached on 7:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JAY PATEL can be reached on (571) 272-2988. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

Art Unit: 2637

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Warananthan KHAI TRAN

Primary Examiner

Page 4

Art Unit 2637

1/14/2005